

FIG. 1

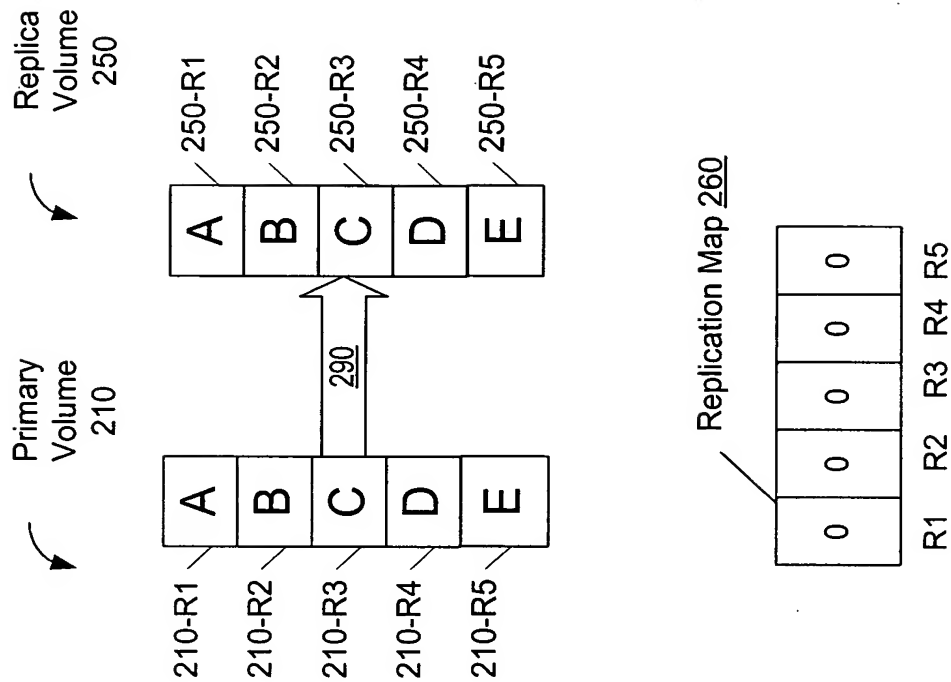


FIG. 2A
Synchronized

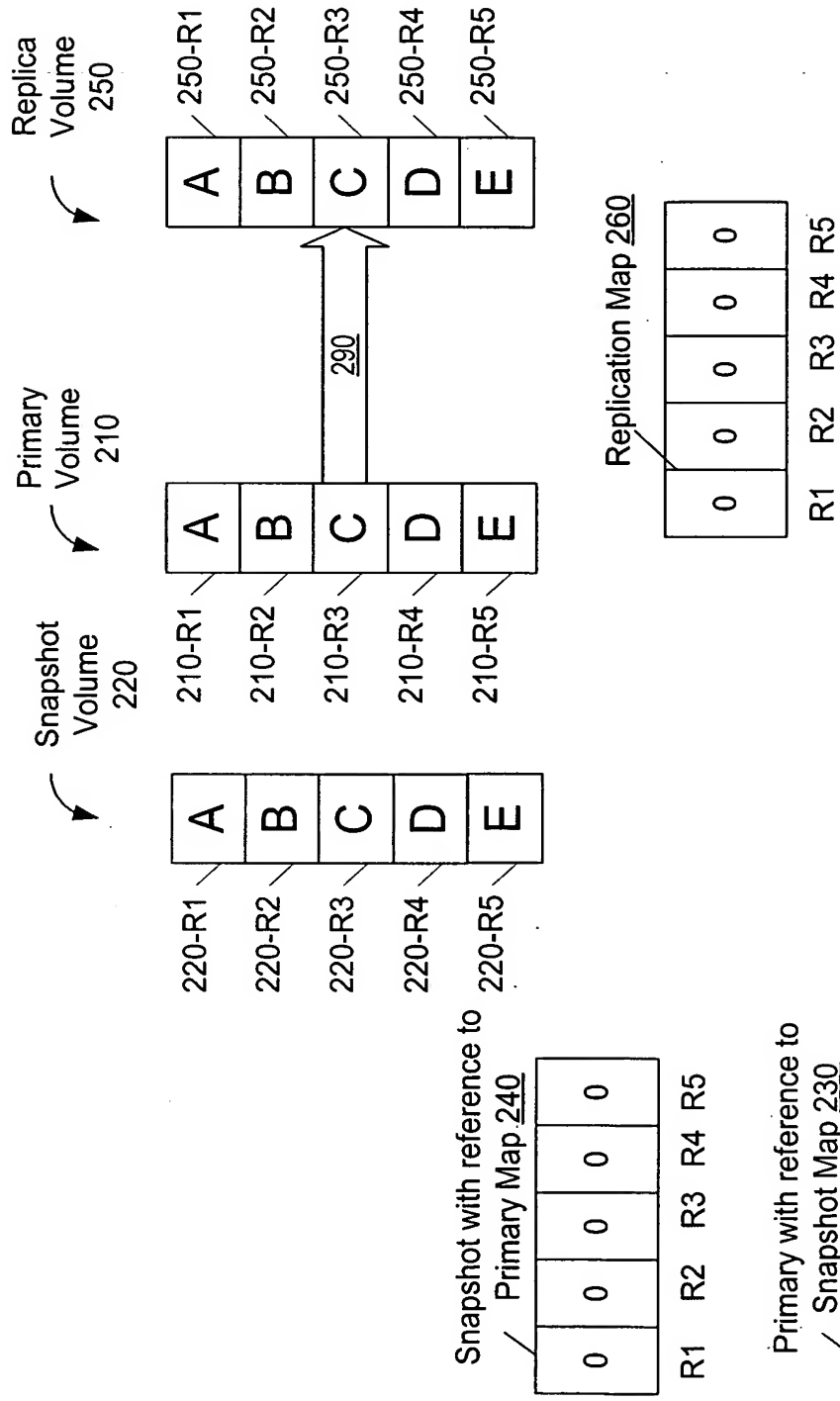


FIG. 2B
Snapshot Made

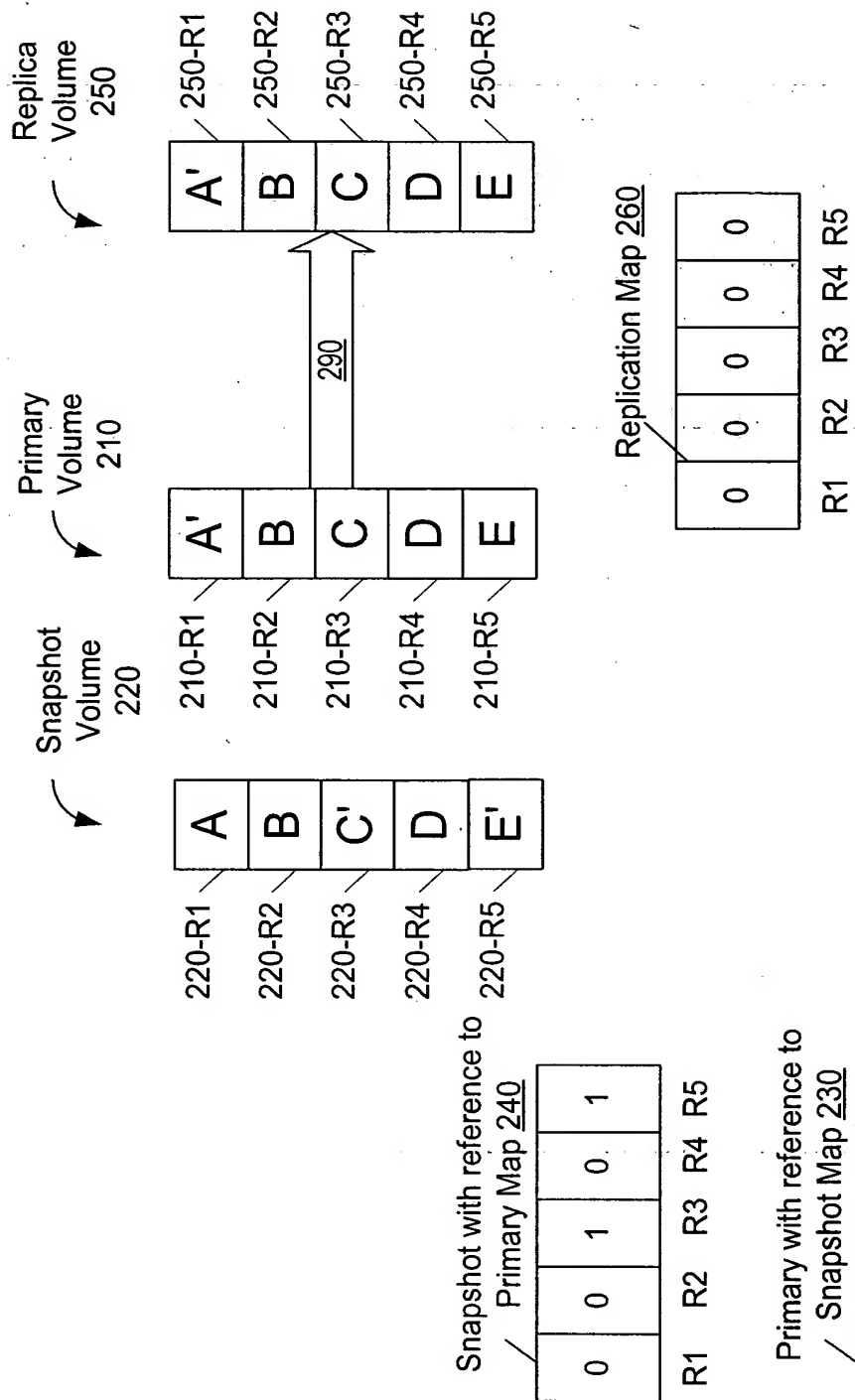


FIG. 2C
*Updates To Primary Volume
And Snapshot Volume*

FIG. 2D
Prepare For
Restoration Of
Primary Volume
From Snapshot

The diagram illustrates the preparation for restoration of a primary volume from a snapshot. It shows three data structures and their relationships:

- Snapshot with reference to Primary Map (220):** A table with 5 rows (A, B, C', D, E') and 5 columns (220-R1 to 220-R5).
- Primary Map (240):** A table with 5 rows (A', B, C, D, E) and 5 columns (210-R1 to 210-R5).
- Primary with reference to Snapshot Map (230):** A table with 5 rows (A', B, C, D, E) and 5 columns (210-R1 to 210-R5).
- Restoration Map (270):** A table with 5 rows (R1 to R5) and 5 columns (1 to 5).

Arrows indicate the flow of information:

- From the Snapshot (220) to the Restoration Map (270).
- From the Primary Map (240) to the Restoration Map (270).
- From the Primary (230) to the Restoration Map (270).

The Restoration Map (270) is a 5x5 matrix with the following values:

	R1	R2	R3	R4	R5
1	1	0	1	0	1
2	0	0	1	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0

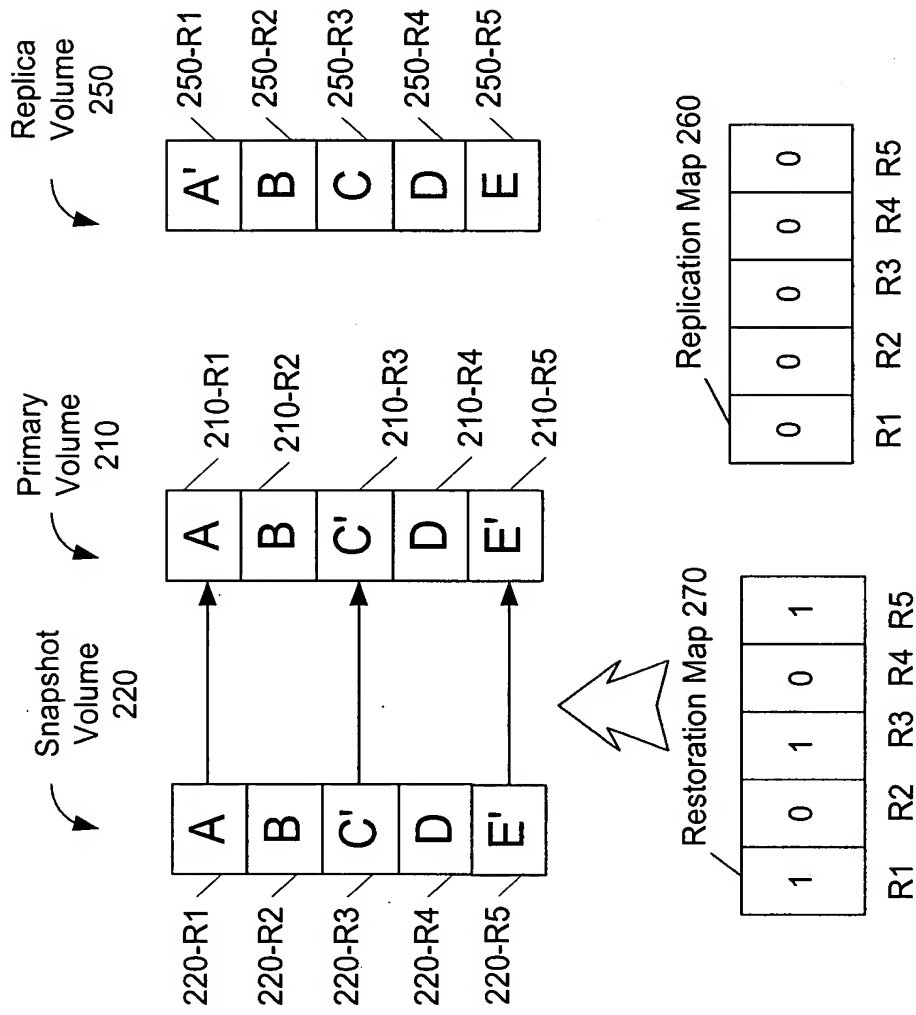


FIG. 2E
Restore
Primary Volume
From Snapshot

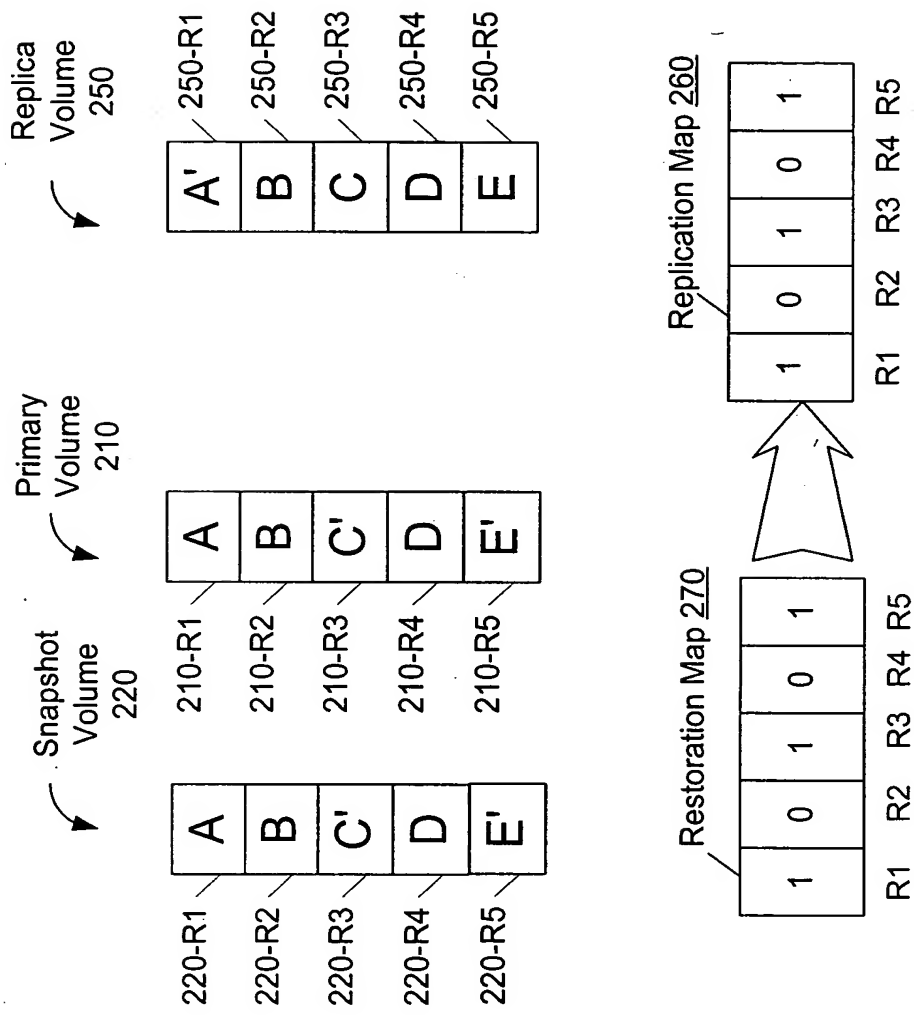


FIG. 2F
Initialize Replication Map

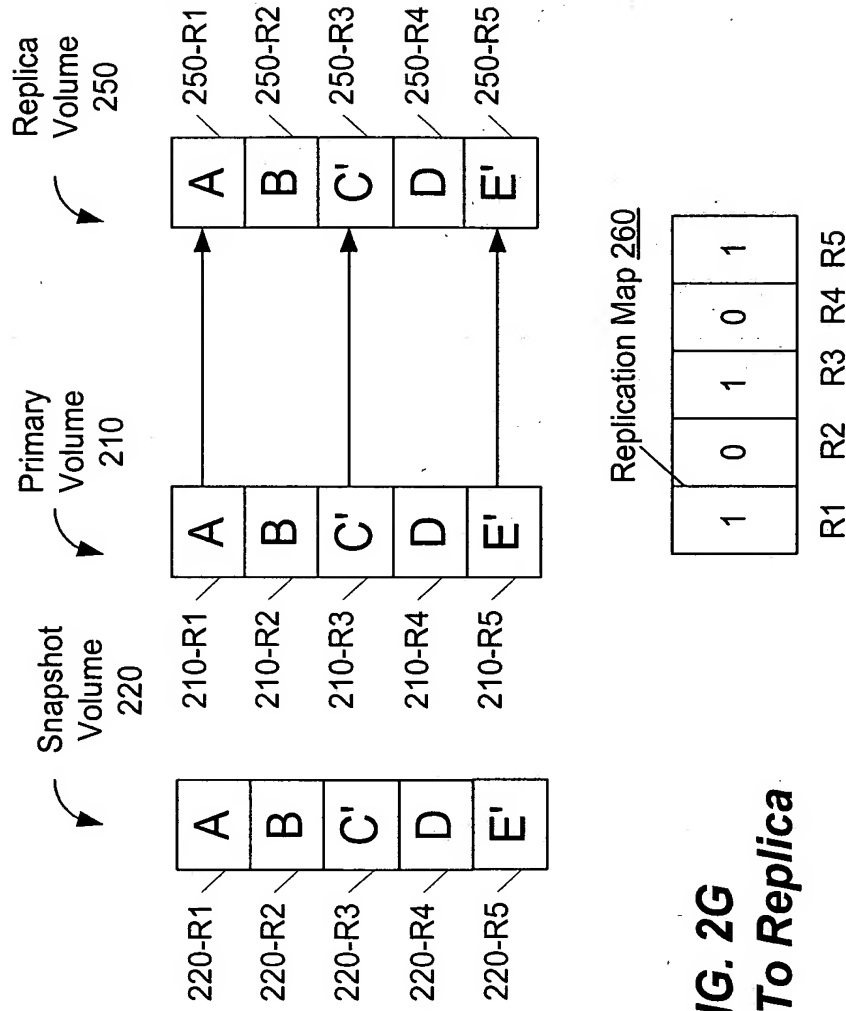


FIG. 2G
Copy To Replica

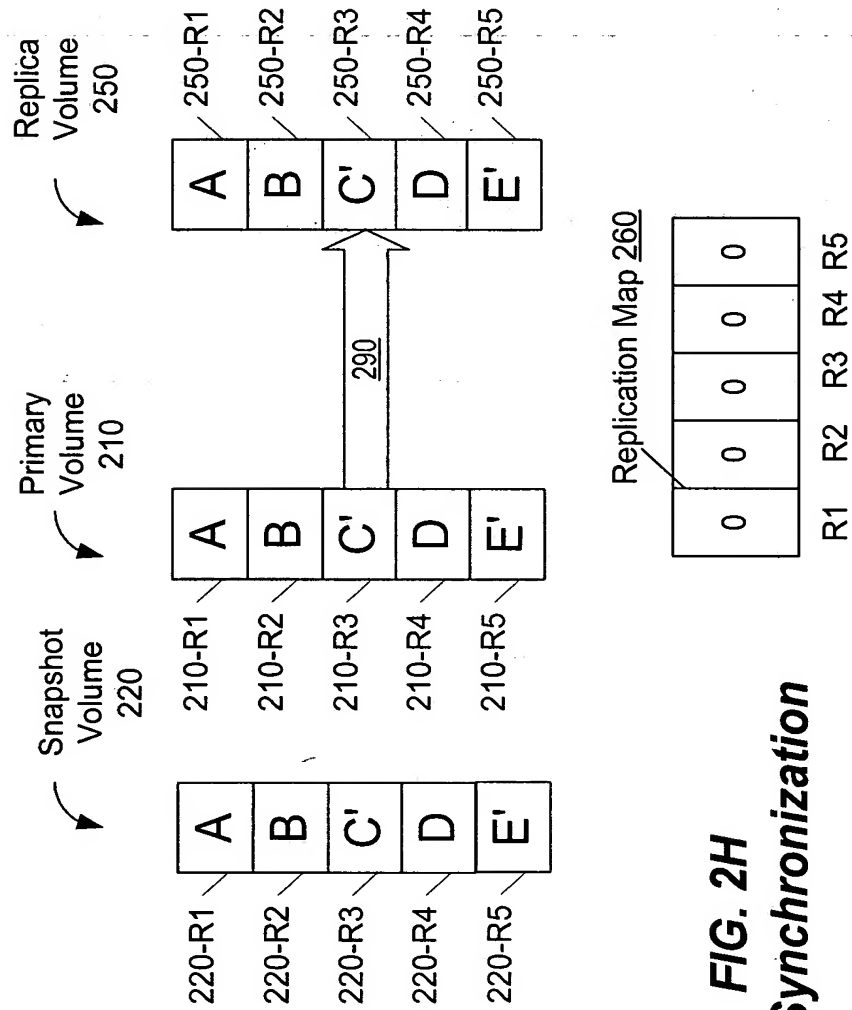


FIG. 2H
After Synchronization

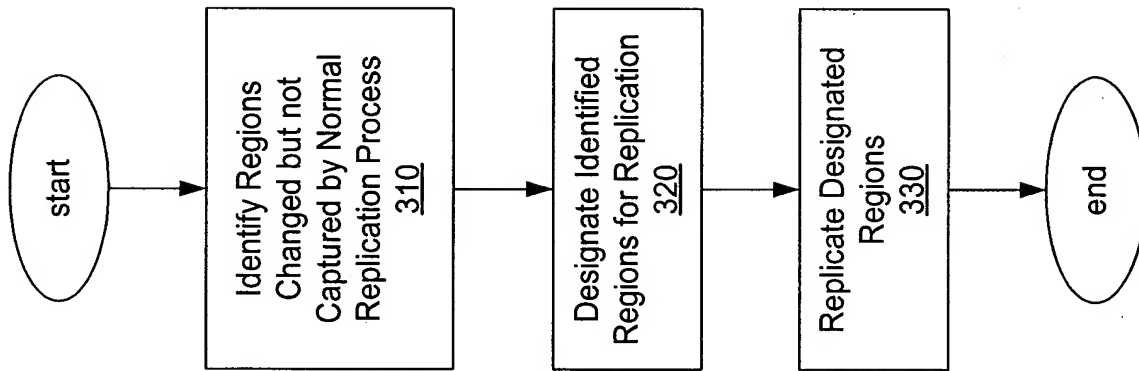


FIG. 3



FIG. 4

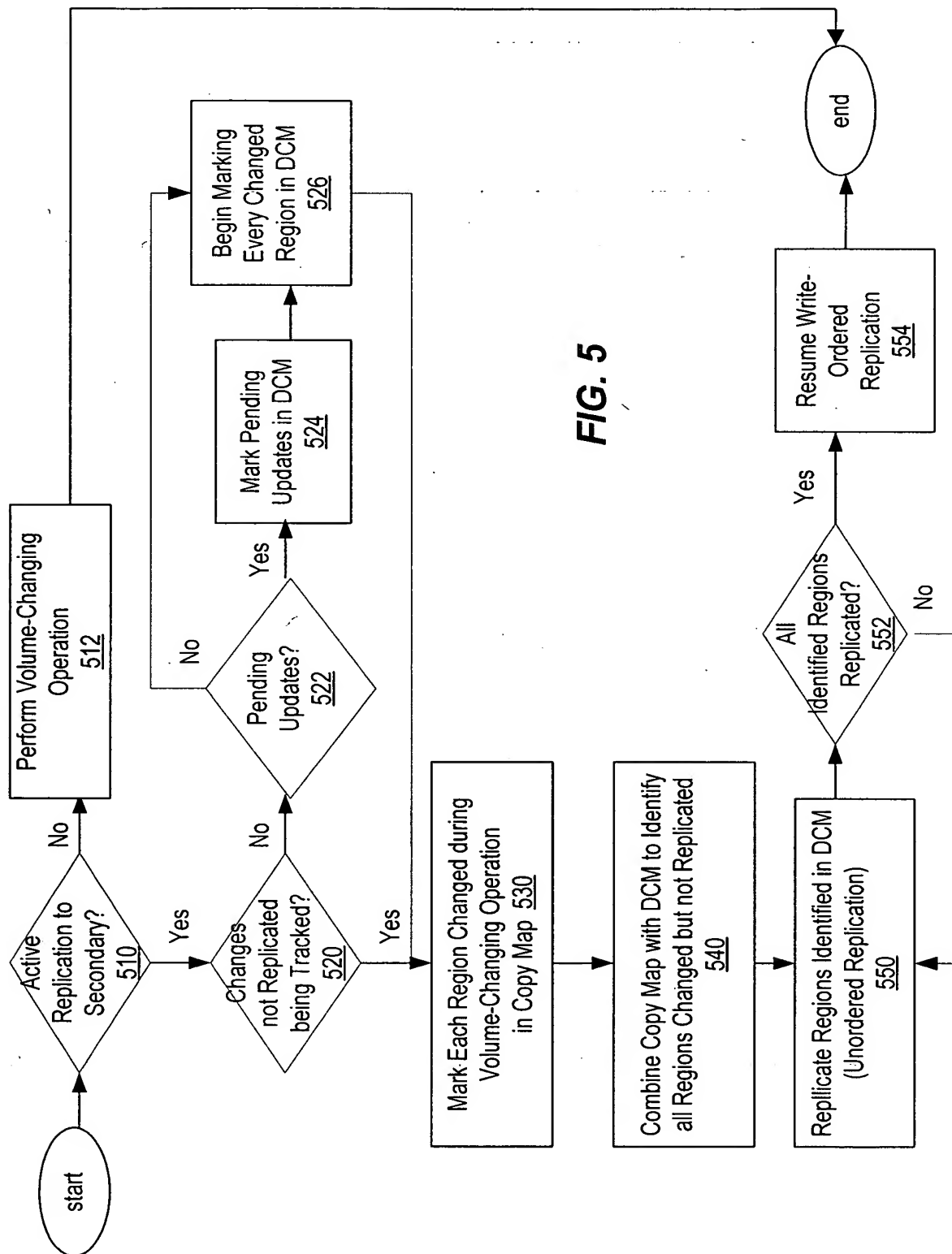


FIG. 5

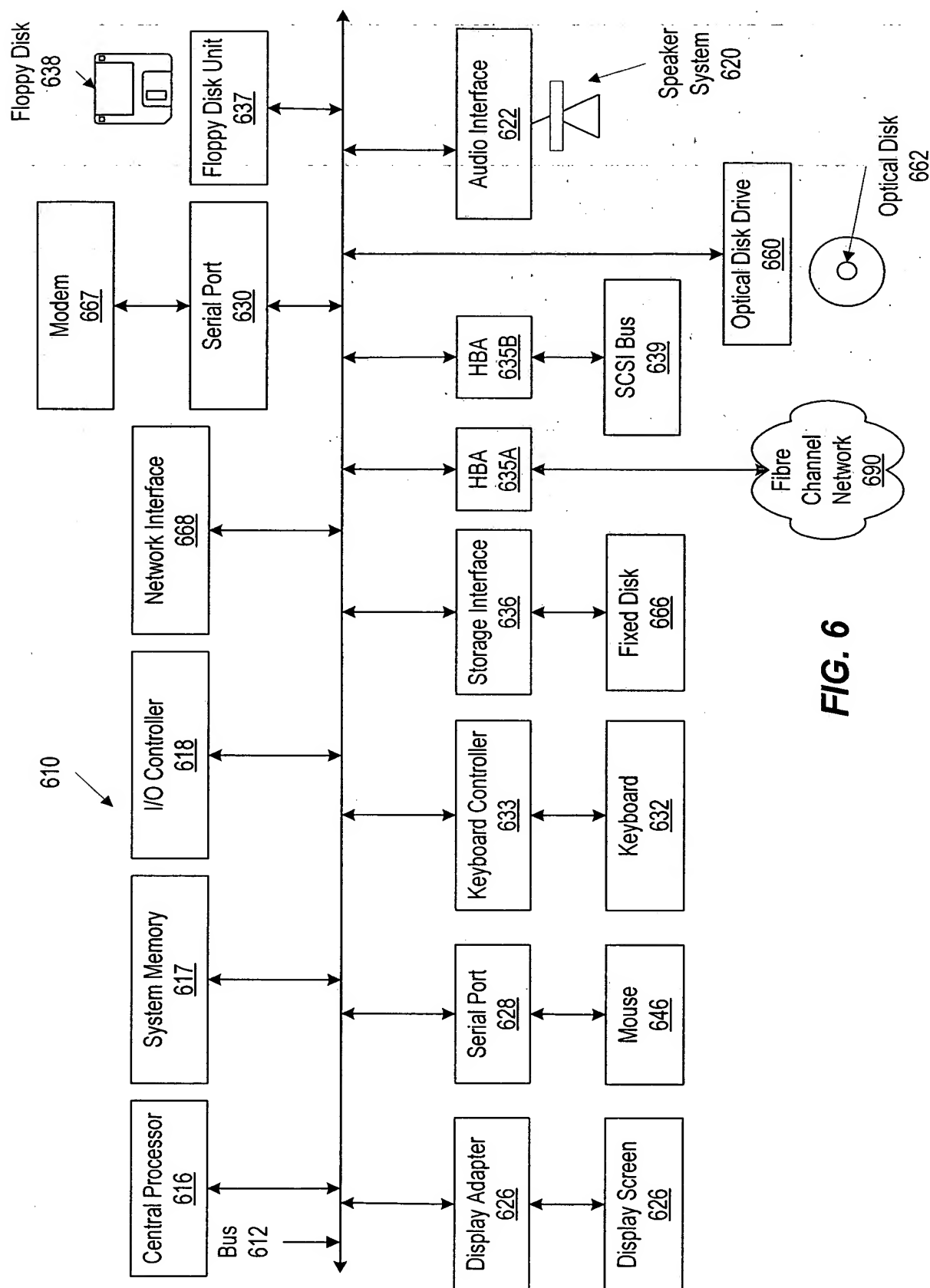


FIG. 6

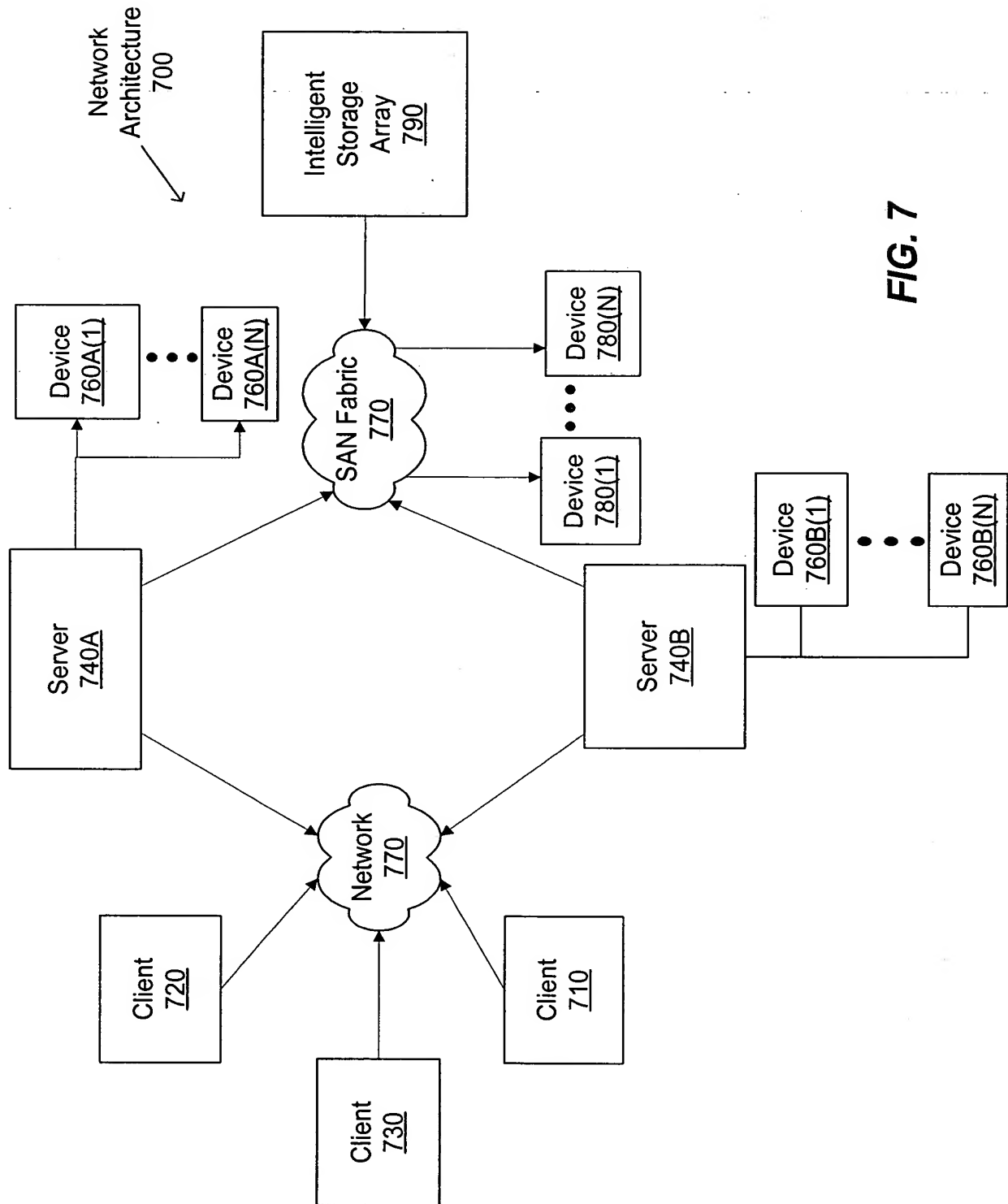


FIG. 7